

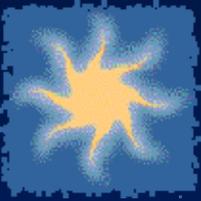
# **SULFUR HEXAFLUORIDE (SF<sub>6</sub>) EMISSION REDUCTION MEASURE Electricity Sector And Particle Accelerators**

**Second Technical Working Group Meeting**

**California Air Resources Board**

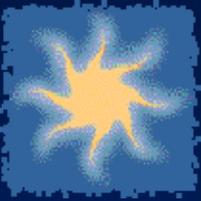
**April 30, 2009**

# SURVEY



- **Status**
  - Participation is increasing
- **Purpose:**
  - Will be used by CARB to help determine costs for this measure
  - Will refine statewide inventory information





# REGULATORY CONCEPTS: PERFORMANCE STANDARD

- Leak Detection and Repair
- Recycling
- Allowable emission rate declines over time
- 1% maximum emission rate by 2020

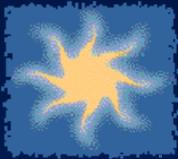




# REGULATORY CONCEPTS: EQUIPMENT STANDARD

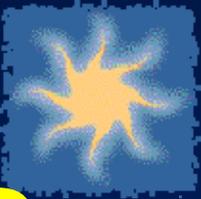
- **Vacuum Insulated Equipment**
  - Low and medium voltage
  - Design consideration for new systems
  - Cost effective/less maintenance
  - Replacement for aging lower voltage equipment





# PARTICLE ACCELERATORS

- **Reporting Requirements**
  - Will be subject to the same requirements as the electricity sector
- **Medical Uses**
  - Very low SF<sub>6</sub> usage for cancer treatment
  - Considering exemption



# PARTICLE ACCELERATORS

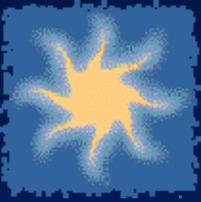
- **Physics Uses**

- Most SF<sub>6</sub> use is from onsite substations
- Lesser amounts are used for research purposes
- Accelerators and their substations will be subject to the same emission reduction measures as those applied to the electricity sector

# DOCUMENTATION AND RECORD KEEPING



- **Will expand the reporting requirements beyond the electric service providers**
- **Current mandatory reporting requirements are expected to satisfy the documentation and record keeping requirements of this reduction measure**



# EARLY ACTIONS/OFFSETS

- **Discussing options with the Office of Climate Change staff**
  - **Rewarding early actors**
  - **Offsets**



# ESTIMATED 2009 TIMELINES

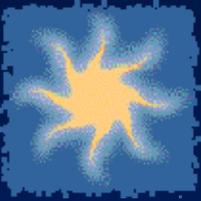
<b>Technical Working Group meeting</b>	<b>July 29th</b>
<b>Workshop on draft regulations</b>	<b>September</b>
<b>Release staff report and begin 45 day public comment period</b>	<b>October</b>
<b>Present proposed regulation to the Board</b>	<b>December</b>



# CONTACT INFORMATION

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